

IN THE CLAIMS

Please cancel claim 4 without prejudice or disclaimer, and amend claims 1, 13 and 14 as follows:

Claim 1 (Currently amended): Amorphous nano-scale carbon tubes each containing a main framework which comprises carbon, and each having a straight shape, a diameter of 0.1 to 1000 nm and an amorphous structure, and each having an interlayer spacing (002) between hexagonal carbon layers of at least 3.7 Å, a diffraction angle (2θ) of 24.1 degrees or less, and a 2θ band half-width of at least 3.2 degrees, as determined with a diffractometer by an X-ray diffraction method (incident X-Ray: $\text{CuK}\alpha$).

Claim 2 (Previously Presented): Amorphous nano-scale carbon tubes according to claim 1, each of which comprises hexagonal carbon layers each having a dimension of the planar direction that is smaller than the diameter of the carbon tube, as determined from a transmission electron microscope image.

Claim 3 (Previously Presented): Amorphous nano-scale carbon tubes according to claim 1, each of which has a 2θ band half-width of at least 7.0 degrees, as determined with a diffractometer by an X-ray diffraction method (incident X-ray: $\text{CuK}\alpha$).

Claim 4 (Canceled):

Claim 5 (Previously Presented): Amorphous nano-scale carbon tubes according to claim 1, each of which has a hollow cylindrical shape or a hollow rectangular prism shape.

Claim 6 (Previously Presented): Amorphous nano-scale carbon tubes according to claim 1, each of which has at least one open end.

Claim 7 (Previously Presented): Amorphous nano-scale carbon tubes according to claim 1, which are formed on a substrate, a particle or a porous material.

Claim 8 (Previously Presented): A gas-storing material comprising an amorphous carbonaceous material containing the amorphous nano-scale carbon tubes according to claim 1.

Claim 9 (Original): The gas-storing material according to claim 8, which contains at least one of a metal salt and a metal.

Claim 10 (Original) The gas-storing material according to claim 9, wherein the metal salt and the metal are selected from the group consisting of iron, cobalt, nickel, copper, platinum, palladium, rubidium, strontium, cesium, vanadium, manganese, aluminum, silver, lithium, potassium, sodium, magnesium, hydrogen-occluding alloys and metal complexes.

Claim 11 (Original) A method for storing a gas, wherein a gas is stored using the gas-storing material according to any one of claims 8 to 10.

Claim 12 (Original) The method according to claim 11, wherein the gas to be stored is hydrogen, methane, helium, neon, xenon, krypton or carbon dioxide.

Claim 13 (Currently amended): A method for producing a carbon material containing amorphous nano-scale carbon tubes according to claim 1, the method comprising subjecting a heat decomposable resin having a decomposition temperature of 200 to 900 °C to excitation treatment in the presence of a catalyst ~~comprising a metal powder and/or a metal salt,~~

the heat decomposable resin being selected from the group consisting of polytetrafluoroethylene, polyvinylidene chloride, polyvinylidene fluoride and polyvinyl alcohol, and
the catalyst being at least one halide of a metal selected from the group consisting of magnesium, iron, cobalt and nickel.

Claim 14 (Currently amended): The method ~~for producing said carbon material containing the amorphous nano-scale tubes~~ according to claim 13, wherein the catalyst is iron chloride metal powder and/or the metal salt is at least one member selected from the group consisting of alkaline earth metals, iron, cobalt, nickel, chromium and their salts.

Claim 15 (Original) The method for producing said carbon material containing the amorphous nano-scale carbon tubes according to claim 13 or 14, wherein the excitation treatment of the heat decomposable resin is carried out by a heat treatment in an inert gas at a temperature of 300 to 3000°C.

Claim 16 (Original) The method for producing said carbon material containing the amorphous nano-scale carbon tubes according to claim 13 or 14, wherein the excitation treatment of the heat decomposable resin is carried out by a light irradiation treatment in an inert gas at a temperature of room temperature to 3000°C.

Claim 17 (Original) The method for producing said carbon material containing the amorphous nano-scale carbon tubes according to claim 13 or 14, wherein the excitation treatment of the heat decomposable resin is carried out by plasma treatment in an inert gas at a temperature of room temperature to 3000°C.

Claim 18 (Original) The method for producing said carbon material containing the amorphous nano-scale carbon tubes according to claim 13 or 14, wherein the excitation treatment of the heat decomposable resin is carried out by electron beam irradiation treatment in an inert gas at a temperature of room temperature to 3000°C.

Claim 19 (Original) The method for producing said carbon material containing the amorphous nano-scale carbon tubes according to claim 13 or 14, wherein the excitation treatment of the heat decomposable resin is carried out by ion beam irradiation treatment in an inert gas at a temperature of room temperature to 3000°C.

Claim 20 (Previously presented): A carbon material containing the amorphous nano-scale carbon tubes according to claim 1.

Claim 21 (Previously presented): The amorphous nano-scale carbon tubes according to claim 1, each of which has an interlayer spacing (002) between hexagonal carbon layers of 3.9 to 4.7 Å, a diffraction angle (2θ) of 18.9 to 22.6 degrees, and a 2θ band half-width of 7.6 to 8.2 degrees, as determined with a diffractometer by an X-ray diffraction method (incident X-ray: $\text{CuK}\alpha$).